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Original Communications.

THE COLD BATH DURING MENSTRUATION.

By C. G. PUTNAM, M.D., Boston.

The habit of cold bathing is daily becoming more prevalent and, whether as a means of promoting health or simply as a luxury, its deprivation is felt to be a serious loss. Especially is its invigorating influence needed when to the summer's heat are added the languor and debility of the menstrual period.

Having been often consulted in this regard, I have for many years advised a continuance of the customary general bath during this period. In the absence of any precedent, this advice was not given, at first, without some anxiety, inasmuch as it was opposed to traditional custom, and was, apparently, in conflict with judicious rules. But the inconsistency is more apparent than real, for, whatever the reason, whether prolonged application, suppressed transpiration, or some peculiarity in transmission, the influence upon the pelvic organs of cold propagated from the feet is different from that applied to the whole surface as in the general bath. The latter, moreover, unlike the local cold, is not depressing but exhilarating, and is followed by a healthy reaction.

Be this as it may, while there has not to my knowledge occurred any untoward accident, there has generally been a positive gain in health and comfort. I have been told that the flow has occasionally been retarded for a few minutes, but only to be restored the more freely.

I would not be understood to advise the bath at the menstrual period and only then. We should feel also some hesitation in recommending to one who, if not in the habit of daily cold bathing, had not at least some experience of its effects in ordinary states of health. Regard, too, should be had to the state of the system and to special idiosyncrasies. There are those to whom even the usual washing of the face and neck with

cold water at this period is disagreeable. There are those again to whom, under any circumstances, the general bath, instead of being grateful, is disagreeable, and perhaps prejudicial.

In sea-bathing, the well-known rules should be scrupulously observed, viz., to choose the forenoon rather than the afternoon—to enter the water while yet warm, and to leave it before getting chilled. In order to avoid headache, it is desirable thoroughly to immerse the whole head. To most women this is attended with too much inconvenience, but the forehead and back of the neck should be immersed as freely as possible.

P.S.—A medical friend at my elbow suggests that the "inconvenience" may not amount to much, as, in the present phase of civilization, it is often possible for the hair to be high and dry though the head be never so wet.

A CASE OF POISONING BY STRAMONIUM.

By C. W. STEVENS, M.D., Charlestown.

Miss H., aged 28, being affected with an attack of asthma, applied to a Boston botanic practitioner, who gave her a "handful of stramonium leaves, and directed her to steep them in a pint of water, and then drink freely of it." At 2.30, P.M., of May 26, she drank a teacupful of the infusion. In about an hour she was taken with a feeling of faintness, and on trying to go for water staggered like a drunken person, and with difficulty returned to the sofa. I was called in a few minutes. Found her in great distress, complaining of dizziness, faintness, and presentiment of impending death. Her pupils were dilated to their fullest extent, her skin was hot, the pulse 120 and irregular, while the heart was beating in a tumultuous manner. The family had no idea of the cause of her sickness, but on my pressing questions they brought me a bowl of infusion of stramonium. They were horrified to learn that stramonium and

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apple peru were the same substance. I ordered an emetic, which acted promptly; sinapisms to the extremities; ice-water to the head. As she was in an alarming syn-copal condition, I gave her ammoniated tincture of assafoetida.

9, P.M.—A red rash covered the whole forehead and face, which were cedematous; the head hot, the pupils insensible to light. She had an incoherent delirium, inclining to talk all the time. Her breathing was ster-torous. Pulse 120. I now ordered

Tinct. opii deodorat., ʒij.

Tinct. veratri viridis, gtt. xij.;

Syrupi simplicis, ʒiiss.

One teaspoonful every two hours.

May 26, 7, A.M.—Consciousness has re-turned; the rash is less; complains of head-ache and indistinctness of vision; pupils still dilated; pulse 80. I continued the same mixture, only leaving out the vera-trum. She made a rapid recovery, the my-driasis being the last symptom to disappear.

I wish to call attention to one or two points in the toxic effects of stramonium. First, the rash. Boerhaave mentions the case of a woman whose "features were red." Alibert gives a case in which the "face was flushed." Dr. Turner has five cases of children whose "faces were dark red." Dr. Young speaks of a "livid suf-fusion of face." I might quote other cases. I think the stramonium rash has been over-looked and mistaken for flushing. In my case the rash was distinct, and on an oedema-tous, slightly pitting skin. The color is not of the scarlet nature of belladonna ery-thema, but of a darker shade. My opiate treatment I used by considering the prop-erties of stramonium identical with those of belladonna, and believing in the antagonism of opium.

CASE OF FACIAL NEURALGIA.

By JOHN J. MCSHERRY, M.D., Boston.

D. C., aged 42, applied to me June 17th, 1871, suffering from paroxysms of severe pain, mostly of a plunging, lancinating character, shooting in the course of the facial nerves and extending under the molars of the left side. He had felt no trouble in the superior maxillary of that side. The patient had applied for medical treat-ment four years previously, in Montana Ter-ritory, and again in New York, without ob-taining any relief. He had tried all known remedies without success. Visited Boston to see his sister, and called on me as before mentioned.

On making an examination, I found that three molar teeth had been extracted by advice previous to his arrival. A spongy state of the gums existed, with a slight ulceration and fetid breath. Paroxysms of pain occurred every ten or fifteen minutes, preventing sleep. When he became over-powered by sleep he was at once awaken-ed, and started up screaming with the severe pains.

A faithful use of cinchona, iodoform and ferri valerianat. caused some general im-provement up to the 30th of June, at which time I commenced subcutaneous injections and also the employment of hydrate of chlo-ral, without favorable result. The follow-ing lotion was also employed, but without avail:—

R. *Ætheris sulph.*, ʒij.;

Chloroformi,

Tincturæ opii,

Olei terebinthinæ,

Tincturæ capsici, aa ʒij.;

Extracti belladonnæ, ʒi. M.

No ease was obtained from any liniment or medicinal preparation whatever. I made an examination of the teeth and gums on the 2d of July, and found what I supposed necrosis of the alveolar process of the su-perior maxilla on the left side. I recom-mended extraction of the diseased bone, as I thought, an opinion I had formed because the apparent sequestrum was above the al-veolar process. I consulted with Dr. Dan'l G. Harkins, surgeon dentist, of Tremont Street, and we concluded to extract what appeared to be the necrosed bone, but which, on extraction, proved to be a dens sapientia covered with a fleshy bulb and imbedded in the superior maxilla. The tooth had pressed on the trunk of the infra dental nerve in its course, and had caused pain of the most excruciating character, which the patient had referred to the lower maxillary bone.

Since the wisdom tooth has been extract-ed he has not had a single paroxysm of pain, with the exception of one or two mo-mentary flashes. He feels well and free from pain, and has slept sounder since than for four years previous, and intends to re-turn to Montana Territory to resume his mining operations.

CASE OF FRACTURE OF ARM AND THIGH BY MUSCULAR ACTION.

By JAMES O. WHITNEY, M.D., Pawtucket, R. I.

The following case may be deemed worthy of publication in connection with the sub-

ject of spontaneous fracture, noticed in the JOURNAL of July 27. The patient was an unmarried woman, about 25 years of age. She had never been robust, and for a few years prior to the first fracture, which occurred in the winter of 1846, her health had been deteriorating without being attended with especial local ailments, except an intractable cutaneous disease, confined to the face. The fracture of the humerus took place thus: while sitting between a young lady and gentleman who were playfully contesting for the possession of a finger-ring, she caught hold of the wrist of one of them, and the effort to retain the hold broke the bone near its surgical neck. Great pain was at once experienced. I saw her within a few minutes, and suggested that there was a fracture. The family physician was called, and we put the limb in some retentive apparatus. I was an invalid, and merely present from this reason. I left the place where it happened in a few days and therefore cannot give details, but I think union took place in the usual length of time. Some three or four years afterwards, her health gradually failing, upon stepping into a stage-coach the thigh gave way from the effort alone. Union never took place, and after lingering a few months she died. Dissection showed a wasting of each fragment of the fracture. There appears to have been no effort at reparation whatever; on the contrary, a tapering of the extremities was found. Of her brothers and sisters, some have a full share of health, others not. Her father is living, over 80 years of age; her mother died of uterine cancer. Phthisis carried off a sister, and other members of her family have in times past yielded to this disease.

Selected Papers.

MORTALITY OF CHILDREN IN THE CITY OF BOSTON,

From the Registrar's Report of the City of Boston, we make the following extract on a subject of importance:—

There was a large mortality in the city of Boston during the past year (1870) among children under five years of age. The deaths of these children make no less than 43 per cent. of the whole mortality. In 1869, the percentage was less than 42. The deaths of children under one year made 27 per cent. of all the deaths. In 1869, the

percentage was 24.88. How this large mortality compares with that of some other large cities will be seen by the following table:—

New York (1869), 20.42; Baltimore, 28.90; Washington, 28.83; Boston, 27.00; Richmond, 25.50; Brooklyn, 25.25; Philadelphia, 24.85; San Francisco, 21.81.

The cause of this excessive mortality is very generally attributed to unhealthy residences, want of nutritious or wholesome food, and to exposure and neglect. These, however, are but secondary causes, the primary one existing back or at the bottom of all these outlying ones, viz., general ignorance. It is not too much to say, that if those who are suffering from the causes above enumerated were properly enlightened as to their inevitable consequences, they would feel a natural desire to escape them. The cause for this unhappy condition is easily understood. The ignorant and unintelligent are always disqualified from engaging in other than the lowest employments, which bring to the laborer the smallest modicum in return. This, in its turn, necessitates the occupancy of wretched tenements, in the most undesirable localities, where, badly sheltered and clothed, with insufficient or unwholesome food, and confined to the most laborious and injurious occupations, the seeds of all the diseases that flesh is heir to are profusely sown. Under such melancholy circumstances, it cannot be surprising that the progeny of such unfortunates are so remorselessly stricken down.

This subject is one which concerns not only the philanthropist, but the whole community. It presents directly the question, whether this loss of material wealth (for this excessive mortality is nothing less) shall continue, or that intelligent, energetic measures be employed to counteract it. It must be confessed that to suggest what may seem a remedy is very easily done, but it may not be so easy to apply that remedy. To build spacious, well-arranged tenement houses in salubrious localities will not alone afford relief; for none but the instructed and intelligent, comparatively, can secure them. Hence it follows that, until education itself demands the change, no reform in the present unpromising condition of things need be hoped for. How the educational process is to be conducted, or the requisite receptivity is to be secured, it is not easy to point out. This, it is feared, will prove to be a problem hard to solve, as other questions of a complex character will inevitably present themselves.

This ignorance of the cardinal principles of health on the part of the poorer portion of the community is not to be wondered at, when an almost equal ignorance exists among those who are by mere fortuitous circumstances differently situated. While the first class are oblivious of the real causes of their present condition, and do not regard the results that ensue in the light of cause and effect, the latter have yet to learn, that the moral and material condition of the whole community is involved in the subject.

PATHOLOGY OF PROGRESSIVE MUSCULAR SCLEROSIS.

By WILLIAM PEPPER, M.D., Philadelphia.

The fragment removed from the left deltoid of the patient under examination was of a slightly pale-reddish color. When examined microscopically, a large majority of the fibrils showed distinct, though often fine and delicate, transverse striation. In a few instances, striation was entirely absent, the fibrils looking homogeneous and much like ground-glass cylinders. In a very few fibrils, also, distinct longitudinal striation was visible, and in others there was multiplication of the nuclei in the sarcolemma. In not a single fibril was there any trace of fatty degeneration. The fibrils varied in size from $\frac{1}{15}$ " to $\frac{1}{10}$ ", or even, in a few cases, $\frac{1}{8}$ ". The striation was particularly faint, or at times even absent, in the largest fibrils. There was a large amount of interstitial white fibrous tissue, with abundant granular matter containing many oval nuclei. In places there were small collections of minute fat-globules or refracting granules.

The fragments removed from the gastrocnemii presented closely analogous conditions. The muscular tissue was merely rather paler red than normal. The muscular fibrils varied greatly in appearance and in size. The transverse striation was in some fibrils perfectly healthy, but in a majority it was altered, though in various ways. Thus, in some it was very faint and difficult to distinguish; in others, it was wholly absent, the fibrils presenting the appearance of fine ground glass. In other fibrils there was a marked appearance of longitudinal striation, due to delicate fibres or very fine fusiform cells arranged in the long axis of the muscular fibril. In many fibrils there was distinct excess of the nuclei of the sarcolemma, which appeared as large oval nuclei with a punctiform nucleus. A few

fibrils presented streaks of minute fatty granules along their centres, and a very small number were decidedly fatty. The muscular fibrils varied greatly in size also. Many were about $\frac{1}{15}$ " to $\frac{1}{10}$ " in diameter; but a number were $\frac{1}{10}$ " to $\frac{1}{8}$ ", while others were as much as $\frac{1}{5}$ ", $\frac{1}{4}$ ", $\frac{1}{3}$ " in width. There was a large excess of interstitial tissue, in places taking the form of long, narrow, wavy bands of pure white fibrous tissue; in others, appearing as abundant granular stroma, thickly strewn with oval nuclei. There was also some curly, elastic fibrous tissue. There was a considerable amount of interstitial fat, existing as scattered globules, or arranged in patches of large, closely aggregated fat-globules. In places isolated muscular fibrils lay imbedded in this fibroid tissue so as to be scarcely visible. But in other places a number of fibrils lay directly in contact with each other, forming a little bundle, around which the excessive growth of interstitial tissue had occurred. The arterioles and capillaries appeared healthy. No nerve-fibrils were detected.

Similar examinations have, as before stated, been made in a number of cases of this disease, and have yielded results agreeing in all essentials with those I have found in the muscles of this patient. The points which I desire to dwell upon as of capital importance in their bearing on the pathology of the disease are, in the first place, that the primary fundamental change in the affected muscles is an excessive growth or hyperplasia of the interstitial connective tissue. This is found to have taken place even in those muscles which have not undergone any increase in bulk, or which are even reduced in size (for instance, the left deltoid in this case). In the latter case it is evident that the process cannot have advanced far, and it also appears probable that there is a certain amount of simple atrophy of the muscular fibrils developed simultaneously. This, however, does not appear to be the only change in the muscular fibrils, which are also found to begin to lose their transverse striation, and to present increase in the nuclei of their sarcolemma, or distinct longitudinal striation. Observe, however, that there is not the slightest tendency to a primary fatty degeneration of the muscular fibril. It may happen that this interstitial growth never reaches such an extent as to cause apparent enlargement of the muscle, so that only certain muscles may thus enlarge. Thus, as a rule, the muscles of the calves are the first to undergo this subsequent change,

and they may be the only ones in which it appears, although numerous other muscles may present the first stage of the process.

In those muscles which do undergo this subsequent enlargement, the hyperplasia of interstitial connective tissue is found to have reached an extreme degree. The appearances presented indicate that the entire process has been one of sclerosis, in which there has been rapid growth of nucleated fibro-cellular tissue, with the development of bands of wavy, fibrous tissue, and even some curly elastic fibres. It is easy to recognize, therefore, the identity of this process with the other sclerotic inflammations, as of the connective tissue of the nervous centres (sclerosis of brain and spinal cord), of the lungs, liver and kidney (cirrhosis), and of the subcutaneous tissue (scleroderma). There is, however, one point in which this affection of the muscles appears to differ from the other sclerotic conditions mentioned. In the latter, we constantly observe that, with the progress of the change, a tendency to organization and contraction of the newly-formed fibrous tissue soon manifests itself, while the essential elements of the part (nerve tubules, liver-cells, or urineriferous tubules) are compressed and undergo atrophic degeneration. In the disease we are now considering, however, there is a simultaneous change in the muscular fibrils, even in the early stage; but this does not appear to depend wholly on the hypertrophy of the interstitial connective tissue, nor does it maintain any definite or constant relation with this latter change throughout the course of the disease.* Indeed, as is seen in this patient, those very muscles which present the greatest degree of sclerotic enlargement may be the strongest of the whole series which are implicated in the disease. It is true that the muscular fibrils of such muscles present a further stage of the change begun in the first period of the disease. Their transverse striation is still more delicate and faint, or is even, in a number of fibrils, entirely lost. But they do not seem to have undergone any further atrophy; indeed, the measurements I have made, and the increased strength in the muscles of the patient's calves, would point to the belief that the muscular fibrils may temporarily share the exaggerated nutrition of the surrounding connective tissue, and undergo a delusive increase in size and

power.* Thus, I find that the fibrils in the gastrocnemii muscles of this patient are fully one-third wider than those in his left deltoid, and that some of the former have acquired the enormous size of $\frac{1}{15}$ in transverse diameter.

Whether this transitory stage usually exists or not, the sclerotic change does not depart from its inevitable law of development. Already in this second stage we have seen patches of fat-globules appearing in the interfibrillar spaces, and as the disease passes into the final stage, this fatty degeneration of the muscle advances with varying rapidity, even leading in some cases to such an accumulation of fat as to be visible to the unaided eye as yellowish streaks. This extreme condition is, however, very rare, and much more frequently the accumulation of fat is moderate. Even when very great, however, it is found to be far more due to the increase of the interstitial fat than to a true fatty degeneration of the muscular fibrils. Their nutrition must be, however, very gravely impaired, so that they undergo atrophy, and in many places entirely disappear, leaving their sheaths empty. This change coincides with the rapid extension of paralysis which characterizes the final stage of the disease.

This detailed account of the muscular lesion naturally leads to the question of the pathology of this curious affection. It cannot be held that the disease depends upon or is essentially connected with any cerebral lesion. It is true that in a number of cases the patients have been idiotic, or at least exhibited marked impairment in intellectual development: in the present case, also, epileptic convulsions are present as a complication. It must, however, be remembered that cerebral disturbances of any kind whatsoever are not uniformly present, that disorders of special sense are rare, and that some cases of the disease have been observed associated with a normal state of the intellectual faculties; and, finally, that in the one case where the nervous centres have been examined, the brain was found healthy. The peculiar character of the muscular lesion and its symmetrical distribution are additional proof, if more were wanting, of the absence of all connection between the disease we are discussing and any cerebral lesion.

Nor is the argument more strong in favor of a spinal lesion as the cause of this affection. It is true that the first idea which

* It may be that in some cases where there is marked loss of power, with general preservation of the size and striation of the muscular fibrils, the sclerotic change in the connective tissue compresses the branches of the motor nerves as they traverse the muscular tissue.

* This enlargement of the size of the fibrils of the gastrocnemii has also been observed by Leyden (loc. cit.).

will arise, on learning from a patient that his malady began with gradual loss of power of both legs, is that there is some disease of the anterior columns of the spinal cord. When, however, as in the present case, we further find that there has been no alteration of sensibility, no loss of coördination of muscular movements, no subjective sensations, such as of formication or of constriction, no implication of either bladder or rectum; when also we learn on careful examination that the loss of power was not in reality the primary symptom, but was preceded by and existed only in proportion to certain muscular changes—we must conclude that the disease is not dependent upon any affection of the spinal cord. The most important fact to be clearly apprehended here is that in reality there is no paraplegia, in the strict and only correct significance of the word, present in the disease we are studying. It is of course true that a paralyzed muscle will often undergo atrophy or fatty degeneration, but these changes are then dependent upon loss of function and of innervation, and are essentially secondary to the interruption of the transmission of motor power. Widely different, however, is the relation which here exists between the loss of power and the alterations in the muscles. There is throughout the course of the disease no real loss of motor nerve-power, nor any interference with its transmission, but merely an interference with its manifestation, owing to a progressive sclerotic change in certain muscles. This change has been slowly advancing for some time before the loss of power is so marked as to attract the notice of the patient; and just in proportion as it progresses, do the muscles become more and more weak, until, when the final stage of the sclerosis is attained, their contractile power is so completely lost that the patient is bedridden and almost motionless. It is on account of the radical difference between this process and any form of paraplegia that I object to the name "pseudo-hypertrophic paralysis," applied by Duchenne to this disease, and greatly prefer "progressive muscular sclerosis," as expressing accurately the pathological condition present.

Having, then, excluded the possibility of either a cerebral or spinal origin for this disease, I can only offer the somewhat unsatisfactory view of its pathology, that it consists essentially in a perverted nutrition of the muscles affected, probably dependent upon a lesion of the branches of the sympathetic nerve which are distributed to the tissues involved. This opinion that the

sympathetic nerve is primarily affected, does not, it is true, rest on any positive or convincing evidence. In a certain number of cases, however, especially in those observed in Germany, there have been symptoms noticed, such as reddish or bluish discoloration of the skin of the affected parts and variations in their temperature, which would certainly indicate some marked disturbance in the vaso-motor supply of the cutaneous vessels, and have accordingly led many of the observers of this disease to adopt this view of its pathology. It must be confessed, however, that such symptoms are not constant, or at least are not present at all stages of every case: thus, in the present instance, the most careful examination fails to determine them. Still, for the present, in default of any exact knowledge or of any more satisfactory explanation, this view of the pathology of progressive muscular sclerosis may be accepted.

I may add that no additional light is to be derived from a study of its causes. It is eminently a disease of infancy and childhood, making its appearance, in the vast majority of cases, between the ages of five and thirteen years. It has, however, been observed to begin in one case at the age of fourteen years; in the present case it was first noticed at the age of fifteen years; and in two cases observed by Benedikt (loc. cit.), and in one by Laycock (loc. cit.), the disease seems to have originated in adult life. The disease is much more common in the male than in the female sex; and, finally, it frequently affords evidence of a hereditary tendency, two or even four cases having been more than once observed in a single family. It usually appears spontaneously, not appearing to depend upon any particular external causes. In single instances it has been attributed to such causes as the influence of cold and damp, or an attack of some eruptive fever. In my own case, the cause assigned by the patient—protracted over-exertion in doing work too heavy for his years—is far more likely to have really influenced the development of the disease. It must be conceded, however, that in its etiology, as well as in its pathology, this curious affection still presents an unsolved problem.—*Phil. Med. Times.*

SUPERNUMERARY LITTLE FINGERS.

By J. ROTHROCK, M.D., Wilkesbarre, Pa.

EXTRA digits are by no means a rarity. When removed, they sometimes show a wonderful pertinacity in growing again.

Darwin instances one case in which they were amputated three times, and, for aught we know to the contrary, the power of reproduction was not even then exhausted.

Recently I was called to see a male colored child three months old. It was the unlucky owner of two supernumerary little fingers, the two terminal phalanges of which, with the joint connecting them, were perfect. The nails, even, were faultless. These supernumerary fingers were attached by a delicate pedicle about one-eighth of an inch long and one-sixteenth thick to the skin over the middle of the outer side of the proximal phalanx of each little finger. On snipping them off with my scissors, the bright arterial hemorrhage showed that they were well nourished; in fact, the pedicle was simply made up of vessels and skin. The other child of the same parents had one supernumerary little finger, similar in location and in all other respects to those removed.

Mrs. T., a sister of the mother of these children, was born with a similar extra digit. She was the only one in a family of ten that evinced any tendency to polydactylism; yet two of her five children had each a supernumerary little finger. Neither of the fathers had any malformation, nor can the tendency be traced farther back than Mrs. T. In all these cases the remaining fingers and toes were regular and normal. Hence the tendency to antero-posterior symmetrical malformation did not exist, or at least was latent. Little fingers were the only "sportive" element in the anatomy of the family. The whole subject is mysterious, so far as its active cause is concerned, but strangest of all is the fact that in the second generation the tendency seemed to have acquired fresh strength, for Mrs. T. and two of her five children each had one, while her niece and nephew (the only children of her sister who had the usual number of fingers) both had extra digits, and one of them had two. We are not yet ready to accept Mr. Darwin's explanation of these facts—i. e. that it is a case "of reversion to an enormously remote, lowly organized, and multidigitate progenitor."

Prof. B. G. Wilder, of Cornell University, has written some able articles upon this subject.—*Ibid.*

THE son of Dr. Jenner, and nephew of the discoverer of vaccination, is now living in a very small cottage, with hardly the necessities of life.

TREATMENT OF CAPILLARY BRONCHITIS IN CHILDREN BY WARM VAPOR.

PROF. ABELIN, of Stockholm, observes that capillary bronchitis, with its usual sequelae, collapse, broncho-pneumonia, and emphysema, belongs to the most dangerous diseases of childhood. It most frequently originates in a simple bronchitis which extends from the larger into the smaller bronchia. It is sometimes, however, a primary affection, and attacks with extreme violence children that are apparently in rude health. When primary it is characterized not only by the intensity, but by the rapidity of its progress. The symptoms resemble more the direct action of a poison than a catarrhal inflammatory affection. From the date of occurrence of the first symptoms the patient passes into a state of collapse, the temperature sinks, dyspnoea and cyanosis augment, and ultimately complete anæsthesia supervenes. The course is usually so rapid that the little patient often succumbs in the course of twenty-four hours, and not seldom in from twelve to twenty-four hours. The usual accompaniments of capillary bronchitis, broncho-pneumonia and emphysema, do not appear in such cases to have sufficient time to develop, or at least they are undiscoverable in the dead body. Death, as in croup, results from the rapid progress of asphyxia. After death, only a quantity of secretion is found accumulated in the bronchia, together with much epithelial debris, and more or less congestion of the posterior lobes of the lungs. In capillary bronchitis, and especially in the paralytic form, every kind of debilitating treatment should be avoided. Abelin, in the earlier period of practice, adopted antiphlogistic treatment, and rarely saw a child recover. Subsequently, he prescribed tonics and stimulants (quinine, musk, camphor, turpentine) with better results; but all these remedies were far surpassed in value by the mode of treatment long employed in his hospital, by the respiration of warm vapor, or rather of placing the patient in a hot-air bath. The children were placed in a properly constructed small chamber, in which was a vessel of water that was kept boiling day and night. Here the patient was retained for days and even for weeks, until complete recovery, which, however, usually soon took place. The result of comparison with other modes of treatment was most satisfactory. The percentage of death, which in 1864 amounted to 48, diminished in 1868 to 18. M. Abelin has also found great benefit from breathing the vapor of

hot water in pneumonia. Lobular pneumonia may likewise be thus treated, and here, in addition, turpentine embrocations and cataplasms are to be supplied. In lobular pneumonia M. Abelin first gives calomel, or, if diarrhoea be present, small doses of calomel with opium or morphia, inf. ipecacuanhæ, with vin. liquiritiæ, thebaicum, and syrup. scillæ, and as soon as the symptoms give way a turpentine emulsion internally and fly blisters externally.—*Journal für Kinderkrankheiten*.

CELL OR SKIN GRAFTING.

By JOHN T. HODGEN, M.D., Professor of Anatomy, &c., Saint Louis Medical College.

HAVING had some experience in this exceedingly interesting practice, and having carried it farther than any of whose experiments I have read, I propose to give my "experience," or rather the results of my observations.

I have practised three methods—1st, that of snipping off portions of true skin with the epithelial layer; 2d, scraping off the epithelial scales; 3d, removing sheets of detached portions of epithelium, and transplanting these to the surface of ulcers not inclined to heal.

The first method is more tedious, requires more care, and is less satisfactory than either of the others. As recommended, I took bits of skin about half the size of canary seeds, and these were carefully placed with the cut surface on the clean surface of the ulcer. To accomplish this, I take a fine cambric needle, fix it in a handle, pass it through as small a piece of skin as I can, and then pass a sharp knife, with a sawing motion, under the needle, with the side of the knife closely pressing the needle, so as to cut the skin at the point where the deeper surface of the needle is in contact with it. I then lay the needle on the ulcer (with the graft upon it) in the same relative position it was upon the skin, dip the point of my knife in water, and placing its back at right angles upon the needle, draw the needle out from eye to point, thus sweeping the graft from the needle and leaving it on the ulcerated surface. Then I apply a pretty thick layer of simple cerate on lint, and cover the surface with it. A pad of cotton wool, and finally a bandage smoothly applied, complete the process. The dressing is not changed for a week. At the end of this time it is probable no trace of the grafts can be recognized; in one week more they will be appa-

rent, and at the end of a month they will be found as large as the finger nail. * * *

Dr. Hodgen gives three cases in which grafting in the usual method was performed, all of which, at the date of reporting, were showing a successful result.

It may be added that my observations correspond with those of others before made in this, that when near the margin, the cuticle upon the margin opposite the nearest point of the graft stretches out to meet and blend with it; so also the opposed margins of two grafts reach out to join one with the other.

The second method of grafting which I have practised is that of scraping the scales of epithelium from another part of the body and dusting the ulcer over with them. These scales, usually regarded as dead, and never thought to be capable again of living or of furnishing germs for the development of a new epithelium, actually imbibe the nourishment they require for vital action, and multiply rapidly, and form a continuous sheet of new epithelium much more rapidly than the larger grafts described as belonging to the first method.

CASE.—H. E., a negro, aged 53, presented a ten-year-old indolent ulcer on the leg, two by three inches. The case was treated as follows:—On the outer side of the sole of the foot the epithelial layer was certainly one-eighth of an inch in thickness, dry and hard as horn, cracked and filled with dirt. With a knife I scraped off a quantity of this dry old epithelium and powdered the surface of the ulcer. At the end of a week the surface presented a whitish, succulent appearance, and in one week more the entire surface, except about one inch square, was coated with a well-marked, dry, epithelial layer, and now—three months from the time of the grafting—there is no appearance of pigmentary matter.

The third method is peculiar, and not before practised, so far as I am aware.

On the 6th of the present month J. E. had soaked his feet and had just completed his ablutions as I passed his bed. I observed a number of sheets of epithelium on the side of his foot that were detached and hanging; these I separated and placed on the ulcers on his leg. The patches were of sizes varying from an inch to a half inch in diameter. With these patches I completely covered the ulcers, making altogether, perhaps, a surface one by two inches. At the end of two weeks the entire ulcers, except one point on one about a fourth of an inch in diameter, had been covered by an epithe-

lial layer. On the 23d of April he had a chill, and on the 25th I observed that much of the new epithelium had been lost.

On the 11th of March, 1871, M. McC. had his hand crushed off near the base of the metacarpal bones, removing the entire hand, except the thumb and base of the metacarpal bones of the four remaining fingers and the carpus, thus leaving a large surface to heal by granulation. On the 15th of May there remained a surface measuring one and a half by two and a half inches unhealed. To this surface I applied sheets of dry old epithelium from the neighboring parts of the same wrist, and on the 23d of May it was almost entirely healed.

I have also taken portions of moles and used these as grafts, and parts of skin stained with India ink.

In order to test the cell growth still further, I have used as grafts shavings taken from the finger nails; also hair. Sufficient time has not elapsed to enable me to determine the results.

I have repeatedly grafted in the various methods before mentioned, on surfaces covered by vigorous granulations, and thus far have failed of success.

A most interesting fact seems to be that when the deep cells of the epithelial layer containing pigment are used as grafts, the pigment increases with the growth of the graft; but when only the dry old scales are used, no pigmentary deposit makes its appearance.—*St. Louis Med. and Surg. Jour.*

OAKUM AND CARBOLIC ACID AS AN ANTISEPTIC DRESSING.

MR. LISTER states that having read reports from various quarters of the efficacy of oakum, he has lately put it to the test with granulatory sores, where, if it should happen to fail, no mischief would result; and he has found it to more than answer his expectations. The reason for its superiority over oily cloths is, he thinks, readily intelligible. Each fibre of the oakum is imbued with an insoluble vehicle of the antiseptic, so that the discharge in passing among the fibres cannot wash out the agent, any more than it can when flowing beneath the lac plaster to a narrow strip of which an individual oakum fibre is fairly comparable. In some points of view oakum was even superior to the lac plaster. When the latter is left for several days together, the discharge, even though small in amount, soaking into the absorbing cloths, loses the carbolie acid it had received from the plas-

ter, and putrefying from day to day assumes an acrid character, and sometimes produces troublesome irritation of the skin. This is of course avoided by the oakum. Again, the lac plaster being quite impermeable to watery fluid, keeps the skin beneath moist, and in fact covered with a weak watery solution of carbolie acid, which perhaps insinuates itself more or less beneath the "protecting," and maintains a slight stimulating influence upon the parts beneath it. But oakum, draining away the discharge as fast as it is formed, avoids this source of disturbance. The result is, that if a granulatory sore be thoroughly washed with an antiseptic lotion, and covered with "protecting" and a well-overlapping mass of oakum secured with a bandage, a dressing is provided which nearly approaches the idea Mr. Lister has long had in view. Mr. Lister's "protecting" above mentioned is made by varnishing oiled silk on both surfaces with copal varnish, which renders it considerably less permeable to carbolie acid, and then it is brushed over with a mixture of starch and dextrine to give it a fibre of material soluble in water, so that it becomes uniformly moistened when dipped into the antiseptic solution. It may be obtained of the Apothecaries' Society, Virginia Street, Glasgow. When it is not at hand, common oiled silk may be used as a substitute for it, if smeared with an oily solution of carbolie acid and used in two layers to make up for its inferior efficiency.—*British Medical Journal.*

ON SPECTRUM ANALYSIS OF BLOOD-STAINS,

By H. C. SORRY, F.R.S., &c.

THE *Lancet* of last Saturday (May 20th, 1871, p. 693) contains an article on the above-named subject, the whole bearing of which is to the effect that this method cannot be relied upon in such inquiries. Now, I think myself entitled to express a very decided opinion on the subject. I have for some years devoted the greater part of my time to investigations by means of the spectrum microscope, have examined many hundred different spectra, and seen those of the coloring matter of blood and of the various compounds derived from it, times without number, and all that I can say is that, as my experience has increased, so much more has increased my confidence in the recognition of blood by this method. Of course, an inexperienced observer could not be trusted, no more than any one ignorant of

chemistry could be relied on in detecting poisons. I must be pardoned for saying that I can only explain the remarks in the *Lancet* by supposing that the writer is not conversant with the subject; for how otherwise could he say that "no discovery has yet been made by means of these (absorption) spectra," when so much light has been thrown on the behavior of blood in presence of oxygen and other gases; and when there have been discovered in some of the lower animals, other substances than hæmoglobin, having similar properties, and supplying its place, besides some hundreds of different coloring matters in animals and plants, which could not have been studied in any other manner. Moreover, it appears to me that, if the writer ever saw the spectra of blood, it must have been under most unfavorable circumstances; he must have examined a bad preparation, with an unsuitable instrument, perhaps out of focus. I cannot otherwise understand how he could say that "all that is to be observed is a little *dimness* here and there in the spectrum. The dim spaces, which are not sharply bounded, have been dignified with the name of absorption bands." Now, I would undertake to show the writer in a few minutes, that the absorption bands seen in the spectra of oxidized hæmoglobin and deoxidized hæmatin, instead of being a mere *dimness*, are as black and distinct as could be desired. He would see that they are as well defined as if we had a piece of rainbow on paper, and marked bands on it with the blackest ink. I willingly admit that, in the case of some substances, absorption bands are indeed faint, or quite absent; but that fact, amongst many others, only serves to distinguish them still more certainly from blood.

My general conclusion is that it is the fault of the experimenter himself, if, except in a few special cases, he fails to recognize a blood-stain containing only the hundredth of a grain of blood, and if he do not easily recognize one that has been kept dry, even for a period of fifty years. For a description of the method to be employed in various cases, I refer to my paper on this subject in *Guy's Hospital Reports*, 3d series, vol. xv., 1870, p. 274, and to Dr. Letheby's paper in the third volume of the *London Hospital Reports*. Of course, I do not pretend to say that human blood can be thus distinguished from that of other animals, but I unhesitatingly say that we can distinguish blood from all other animal and vegetable coloring matters.—*Med. Press.*

Medical and Surgical Journal.

BOSTON: THURSDAY, AUGUST 10, 1871.

DR. MORTON'S CONNECTION WITH THE DISCOVERY OF ETHERIZATION.

It is a simple truism, which every one knows, that a library of books, pamphlets and articles has been written on the subject to which our attention has been once more called; but, as another step towards the settlement of an historical point involving the claim of the discovery of etherization and as a reminder of the points in the controversy, we welcome the little pamphlet which the committee of the citizens of Boston, chosen to raise a Morton testimonial, have laid before us.

We do not care to discuss the topic—it is the old story, with all the facts and arguments which have become trite by constant iteration. We ourselves cannot help expressing, as our conviction, formed long ago and strengthened with every fresh argument, that, whatever may have been done as preliminary to and tending toward the discovery, by Brodie, Davy, Pereira, Wells, Jackson and others, "although many people have *thought* that a man could be intoxicated beyond the reach of pain, Dr. Morton alone *proved* this *previous possibility* to be a *certainly* and *safe*." With Dr. Bigelow, whose words we have just quoted, we thoroughly believe that "without Morton there is no evidence that the world would have known ether till the present day." Brodie and other physiologists had experimented with ether; Pereira had prescribed it as an antidote to the effects of inhaling chlorine gas; Davy had suggested nitrous oxide gas a half century ago; Wells partially carried out the suggestion, but abandoned it in despair; Jackson had "inferred" the advantages of ether; but Morton proved etherization to be at once inevitable, complete and safe.

The ultimate aim of the committee, however, is not to substantiate the claim of Dr. Morton to the discovery other than by reference to previously published testimony; but, confident as they are of the great advan-

tage accruing to the world from the labors of Dr. Morton, they are desirous of furnishing to his family such substantial aid as shall make their lives comfortable.

In support of their application to the profession and the public for aid, the committee say:—

"In asserting Dr. Morton's preëminent claims to this great discovery, we freely admit that he conversed with many persons and consulted many books; that he had suggestions from the conversations of the living, and from the writings of the dead; that he knew of the experiments of Horace Wells. We know and admit, that, long after Dr. Morton had experimented on himself and animals with ether, he conversed with Dr. Jackson; we admit, too, that he was secret in some of his movements, though not more so than any one, who, being on the eve of a great discovery, intends to apply for a patent.

"But we do claim that, up to the final experiments at the Hospital, no one, either in or out of the profession, had ever dared, in public or private, to saturate a man with ether with the intention of producing insensibility to pain, and still less with the idea of urging a surgeon to perform a long and painful operation upon the unconscious patient. Success in such a bold and apparently hazardous act was needed. The world ignored, and justly ignored, all mere 'inferences.' Dr. Morton alone is spoken of in the above letters as the administrator and revealer of anesthetics; and to him, therefore, in the minds of the committee, the honor of the discovery is due.

"It is believed by many in this community, that the memory of so great a benefactor of his race deserves the respect and gratitude of all mankind; especially of all those men and women who have ever seen in the cases of their friends, or have themselves felt, the blessed influences of ether in the relief of acutest suffering.

"It is thought, moreover, that the family of such a man should have long since received a proper testimonial from the country; whereas it is well known that the United States government freely used ether on every battle-field during the late civil war, without recompensing at all the greatest benefactor of its wounded soldiers.

"Dr. Morton was obliged to give up his business, and to spend all his time, and most of his property, in defending his rights; and, finally, life itself was sacrificed in his endeavors to defend his fame as the 'in-

ventor and revealer of anæsthetic inhalation.'"

BOSTON MEDICAL ASSOCIATION.—One of the articles of this Association makes the following provision:—

"The regulations of the Association shall be offered for subscription to all candidates for medical practice in this city, with whom the Fellows of the Massachusetts Medical Society may lawfully hold consultation; and the Secretary shall be charged with the execution of this regulation, with which he shall comply in every instance, so soon as he shall learn that any candidate of the above description may have established himself in this city; or, in case the Secretary has doubts, in any instance, respecting the propriety of offering the articles to any candidate above described, he shall call on the Standing Committee for advice and direction; and, in case any person to whom he offers the regulations shall refuse or neglect to sign the same, the Secretary shall make known such refusal or neglect to the Standing Committee."

The Boston Medical Association was therefore intended by its founders, in 1806, to include all regular practitioners of medicine residing in the city, and this intention has been adhered to by its members from that day to this. Its object is to provide for the medical police of the profession in Boston, to establish a system of rules which shall govern the practice of medicine in our midst, and to regulate the fee-table. It is expected that every regular physician shall become enrolled among its members. We are informed by the Secretary, Dr. J. C. Warren, that a large number of our brethren, and especially the younger members of the profession, have hitherto failed to avail themselves of the opportunity to join the Association. The pamphlet containing the rules and regulations is given to members on their paying the fee, one dollar, and signing the by-laws. It contains instruction on various points of etiquette and the fee-table, which makes it valuable to every Boston practitioner.

THE FRENCH AND RED CROSS SOCIETIES.—
Drs. Ricord and Demarquey, delegates of the Ambulance Society of the French Press,

and Count Serrurier, delegate of the Société de Secours aux Blessés, were recently entertained at Willis's Rooms in London by a number of the most distinguished medical men of that city. The guests had lately arrived in London as representatives of the French Government and the French International Aid Society, and were the bearers of thanks and honorable recognition of the friendly assistance rendered to the sick and wounded of the French army by the officers of the British Society, under the presidency of Colonel Loyd-Lindsay. Sir William Fergusson presided.

In connection with the subject of skin grafting, we would ask if any member of the profession has attempted the grafting of portions of skin from a colored person on a white patient, or the reverse—and the result?

The *National Medical Journal* for July contains a copy of a report made to the British Commissioners of the Admiralty concerning the practical working and the results of the Contagious Diseases Act of 1866, an act designed, as is well known, to regulate prostitution in the United Kingdom. By this report it would appear that prostitution seems to have lost its worst features, to have been softened and its physical evils abated. The plan of the systematic examination of prostitutes, with the quarantine of those who are found infected, has resulted, if we are to credit the testimony of Mr. Sloggett, in a very decided diminution of both the external manifestations of the social evil which are so offensive to the community, and of the far more baneful indirect effects, the development of venereal disease and the spread of moral degradation. A striking contrast is drawn between the condition of troops at stations where the act is enforced and that of those who are not thus restrained; the amount of syphilis among the former showing a very marked diminution. To the objection often made, that the act is cruel to those coming under its action, it is responded that practically the women find it otherwise, and are often inclined voluntarily to take advantage of its provisions. So far from looking on

the examination as a punishment, "hundreds of these women have expressed themselves in the warmest praise of the benefits conferred, in saving them from the results of disease." Finally, from the obvious results of the execution of this law in decreasing disease, diminishing prostitution and reclaiming the abandoned, Surgeon Sloggett argues that its repeal would inevitably be followed by a most excessive reaction, the streets in sea-port and garrison towns again becoming unfit for respectable and orderly inhabitants, syphilis, now so materially checked, again spreading its ravages, and the health of sea-port towns, improved by the results of the preventive acts, again deteriorating.

A REMARKABLE CASE of hepatic abscess, opening by tortuous sinuses through the abdominal walls, and successfully treated by injections of solutions of iodine, is reported in the last number of the *Chicago Medical Journal*. It occurred in the practice of Dr. J. A. Goldsberry, of Indiana. The patient was a merchant of 52 years. At the beginning of his disease he was attacked with deep-seated, excruciating pain in the right hypochondrium, followed in two weeks by a bulging in the right iliac region. After two months of great suffering, a spontaneous opening occurred, giving exit to a large quantity of fetid pus. Subsequently, other sinuses appeared in the abdominal wall, discharging pus freely and occasionally also pure bile. The patient submitted to a variety of treatment during a period of three years, his health in the meantime becoming greatly deteriorated, with no amendment to the local symptoms. At the end of that time Dr. Goldsberry commenced his treatment of the case. First syringing the sinuses with tepid water twice daily for a short time, he now injected a diluted solution of iodine, containing four grains of iodine and eight grains of iodide of potassium to the pint of water. The strength of this injection was gradually increased as the patient was able to tolerate it. After twelve months of this treatment, all discharge of pus and bile had ceased, the sinuses had entirely closed, and the patient's general condition had become almost com-

pletely restored. There was no subsequent return of the trouble.

NOTES OF A CASE OF POISONING BY CHLOROFORM. By CHARLES HENRY HARDY, M.D., L.R.C.S.I.—In the course of last summer I was called, about 10, P.M., to see A. G., a middle-aged man, who had filled the situation of clerk in a large drapery establishment in town, but who, in consequence of his persistent dissipated habits, had been discharged. This so depressed his mind that he had resorted to chloroform, and succeeded in swallowing nearly two ounces.

A friend fortunately going into his room soon after, found him lying on the bed breathing heavily, and quite insensible. Seeing an empty bottle beside him, labelled chloroform, he suspected poisoning, and immediately sent for me.

On my arrival, which would be in from fifteen to twenty minutes from the time his state was first discovered, I found him lying on his back in bed, breathing stertorously, pulse almost imperceptible, with a cold perspiration on the skin.

I immediately emptied the stomach with the pump, and injected strong coffee into it. This was repeated several times. I then applied a strong double electro-magnetic battery along the spine. I never witnessed, in the worst case of tetanus, such convulsions as followed the application; there was complete opisthotonos. In fact, I feared the battery was too strong.

After persisting with this for about two hours, I again introduced the pump, emptied the stomach, and refilled it with strong coffee to which was added some spiritus ammoniæ aromaticus.

On withdrawing the tube, the patient made some efforts to vomit. The pulse became much fuller, and the skin got warm. I now gave instructions to the attendants to watch the patient, and, should they find him getting weaker, or the breathing becoming difficult, to at once send for me.

After about three hours' quiet sleep, the patient evinced some restlessness, when the attendants applied the electro-magnet again; after which he was able to get out of bed and walk about. His recovery was complete.—*Australian Medical Gazette*.

ROYAL SOCIETY OF EDINBURGH.—At the opening of the Session 1870-71, Professor Christison alluded to the notice that had been given of Sir James Simpson, by the Vice-President, Dr. Holme. As to the dis-

covery of chloroform, he said the history of that had never yet been fully given. When fully given, it would constitute one of the most curious instances he knew of the gradual progress of discovery. There was one link which he thought, in justice to Sir William Lawrence, he should supply, as he could do it authoritatively. Sir William Lawrence, in the summer of 1847—the same year in the November of which Sir James Simpson made his great discovery—did repeatedly employ a solution of chloroform as an anæsthetic in his surgical practice, and ascertained that it was a superior agent to sulphuric ether. Had Sir William possessed that knowledge of chemistry which Sir James Simpson very properly held that every medical man should possess, he thought there was a strong probability that he would have anticipated Sir James in his great discovery. But the article had come to him recommended by the very absurd name of chloric ether. He (Dr. Christison) rather believed there was no such thing as chloric ether known; nevertheless there was an article which had been so called. It was recommended to Sir W. Lawrence under that name; it was tried under that name; and he was informed that both Sir William and his assistant saw that something more concentrated was wanted, and that they were busy considering how they might concentrate it when suddenly the discovery of Sir James Simpson came forth and put an end to their inquiries. Had they been aware that the substance in their hands was nothing else than a solution of chloroform in rectified spirit, the solution of their problem would have been very simple indeed.—*Proceedings of Royal Medical Society of Edinburgh*.

PERCHLORIDE OF IRON AND MANGANESE IN NECROSIS, FISTULOUS SINUSES AND HYDROCELE.

—Prof. Marcacci, in an essay on this subject in an *Italian Medical Publication*, arrives at the following conclusions: 1. Perchloride of iron and manganese, injected into fistulous sinuses, destroys the pyogenic membrane, modifies the state of the walls, and favors cicatrization. 2. In necrosis, it acts on the confines of the living bone, stimulating its vessels, so that the detachment and separation of the dead bone are facilitated by the formation of new vessels in the living. 3. In hydrocele, it soon modifies the inner surface of the tunica vaginalis, which becomes filled with plastic exudation, attended with more or less inflammation, according to the quantity and strength of

the injection used. 4. It is not necessary that the tunica vaginalis should be distended by the injection; it is sufficient that the liquid be brought into contact with all parts of the membrane. 5. Very little pain is produced by the contact of the solution, but it is not the less efficacious. 6. A weak solution is sufficient, which should be kept in two minutes. 7. In seven cases of hydrocele in which the injection was used, hard œdema followed, but was not a serious complication.—*British Med. Jour., from L'Imparziale.*

THE USE OF ACETIC ACID IN AFFECTIONS OF THE CONJUNCTIVA AND CORNEA. By Dr. B. A. POPE, of New Orleans.—Dr. Pope employed acetic acid of specific gravity 1.041 (No. 8), which he says is a mild escharotic when of this strength. With it he treated a rebellious case of warty degeneration of the palpebral conjunctiva, for which ordinary caustics and excision had very slowly effected a cure, but could not preserve against relapse. The second attack was cured by the acid in less time, and finally. It was applied by a very fine camel's-hair brush once every day, and only to the spots to be destroyed. Other cases thus treated were the relaxed and hypertrophied state of the conjunctiva in the *cul-de-sac* following chronic conjunctivitis—some cases of trachoma in the stage of development, as an occasional application, and strictly confined to the granulations—an inflamed pinguecula, which the patient refused to have excised—hypertrophy of the caruncle and semilunar fold in pterygium—in two cases of calcareous degeneration of the epithelial layer of the cornea sometimes combined with excision—in a case of dense opacity of the cornea, the result of partial sloughing after ophthalmia neonatorum. When put upon the cornea, the acid will cause an ulcer after two or three applications, and care must be taken not to let this process make unmanageable progress—with such vigilance the new tissue which repairs the ulcer was found to have a gratifying degree of transparency. It needs to be repeated a number of times to attain the best result, and is a remedy which only a skilful hand should apply, and an experienced eye watch, but doubtless it may do good service in some intractable cases, as enumerated.—*Archives of Ophthalmology and Otology.*

USE OF THE STOMACH-PUMP IN DISEASES OF THE STOMACH.—Dr. Wm. Pepper, in the

Philadelphia Medical Times, after detailing a case of cancer of the pylorus, in which the daily emptying and washing out of the stomach by the stomach-pump had afforded the most marked relief to the patient, remarks as follows:—

The next point of interest is in connection with the employment of the stomach-pump in the treatment of this case. The use of this means in the treatment of dilatation of the stomach was introduced by Kussmaul, of Freiburg, in 1867. The case in which he first employed it was one of dilatation of the stomach, probably depending on ulcer near the pylorus, in which there was frequent vomiting, burning in the stomach, emaciation and exhaustion. After the stomach was emptied, Vichy water was thrown in, and again removed by the pump, so that the organ was thoroughly washed out. For two days following, the relief was complete, and the symptoms, when they returned, were again relieved by a similar procedure at intervals of two or three days. In a fortnight, the patient had improved so remarkably that she might be described as a different person. In two months she had gained fifteen pounds in weight, and ultimately recovered completely.

Several other cases have since been recorded in which the employment of this mode of treatment has been followed by permanent cure of dilatation of the stomach. The advantages which are gained by the evacuation of the contents of the stomach at suitable intervals in such cases are evident. The retention of the food in the stomach is speedily followed by fermentative and putrefactive changes, while the accumulating contents constantly increases the dilatation. It is true that frequent vomiting is usually excited, but it fails to empty the viscus. Thus, in the case here recorded, over four pints of fluid were withdrawn from the stomach the first time the pump was used, although the patient had taken but little food for some days preceding, and had vomited occasionally during that time. The presence of this accumulation of indigestible fermenting fluid must cause great distress by its local action on the gastric mucous membrane, while the general nutrition suffers rapidly and severely, because all food taken into a stomach with such contents must speedily undergo fermentative changes without being at all digested.

In cases of scirrhus of the pylorus, this treatment can of course only be palliative; and yet in many patients with that disease

I am satisfied that several of the worst and most annoying symptoms depend on the constant presence in the stomach of fermenting and decomposing food, the action of which is to utterly prevent digestion, and to distend and dilate the stomach so as to impair its propulsive power. The hypertrophy of the muscular coat of the stomach, which is often developed in scirrhus of the pylorus, does something to compensate for this, but cannot neutralize the evil effects; and it appears clear both that the patient's sufferings are increased and his life shortened by the existence of this state of the gastric contents.—*New Remedies.*

ATROPHY OF THE NERVE-CELLS OF THE MEDULLA AND THE PONS. By MM. DUCHENNE and JOFFROY.—MM. Duchenne (of Boulogne) and Joffroy give a *résumé* of the pathological anatomy of the nerve-cells that is of more than usual interest. Three diseases, progressive muscular atrophy, labio-glosso-laryngeal paralysis, and atrophic infantile paralysis, formerly believed to be muscular, are now proved to be due to one and the same anatomical lesion—alteration in the nerve-cells, producing their atrophy, with a tendency to their utter destruction.

Clinically, these cases can be divided into two classes—(1) where the atrophy of the cells is acute, *e. g.* atrophic infantile paralysis; (2) where it is chronic, *e. g.* progressive muscular paralysis of the adult. In the first the paralysis attacks suddenly or very rapidly a number of muscles, of which, in time, some recover their functions; but in the second, the symptoms, slight at first, become gradually worse, are often stationary for a time, it is true, but do not disappear, and never even retrograde. The second form is often hereditary—the first is not; the second is most frequent in adults, the first in children.

But each of these two forms of disease can be further subdivided, according to the age at which it appears. Acute atrophy of the nerve-cells has (a) a common form seen in infants—atrophic infantile paralysis; (b) a much rarer form, seen in adults—atrophic adult paralysis (see the third edition of Duchenne's "*Electrisation localisée*"). Chronic atrophy of the nerve-cells reverses the rule, being very common in the adult, but much more rarely seen in childhood, where it appears only as a hereditary taint. But in this chronic atrophy it is not sufficient to distinguish only the ages at which the disease appears, but also the cases in which

alteration attacks the cells of the medulla and pons universally, and those in which it is localized in a particular region. Accordingly, we distinguish the following forms:

(a) The medulla is the first point invaded, when the muscles of the trunk and extremities will be affected; but these troubles, not being fatal, will permit the lesion to extend frequently first to the nuclei of the hypoglossal and facial, and then to those of the spinal accessory and pneumogastric. When the disease attacks the two last named nuclei, the disease becomes rapidly fatal from respiratory and circulatory troubles.

(b) Not rarely the disease begins in the floor of the fourth ventricle, in the hypoglossal and facial nuclei, the muscular troubles being then in the tongue and lips, and extends, as before, to the spinal accessory and pneumogastric.

(c) In this form the atrophy of the nerve-cells develops itself everywhere at once, but death is produced as before.

Progressive muscular paralysis corresponds generally to the form (a); glosso-labio-laryngeal paralysis to the form (b); and Charcot's case (*Archives*, No. 3, 1870) to the form (c).

In the form (a) the disease generally begins in the cervical enlargement of the cord, and the first symptom is atrophy of the muscles of the thenar eminence, followed by atrophy of other muscles. The muscles waste away, but are never paralyzed.

In the form (b), where the hypoglossal is first affected, the muscles of the tongue are paralyzed without any wasting, and, after all voluntary movement is abolished, galvanization will still act on the muscles. This suggests the idea that there may be motor cells and trophic cells, whose separate destruction may cause these various forms. A detailed case of glosso-labio-laryngeal paralysis, with autopsy and careful microscopic examination, follows.—*Med. Times*, from *Archives de Physiol.*

EPITHELIOMA REMOVED BY BROMINE.—Dr. Wynn Williams showed to the Obstetrical Society of London, "a patient nearly the whole of whose lower lip had been removed for epithelioma eighteen months previously. The disease shortly appearing in the cicatrix, the growth was successfully treated by two injections of bromine, twenty drops to a drachm of spirit. There was no appearance of disease at present."—*Lancet.*

Medical Miscellany.

THE McLEAN ASYLUM.—The Trustees of the McLean Asylum at Somerville have invited Dr. Isaac Ray, formerly of the Butler Hospital, Providence, and known to the profession as a writer on the Medical Jurisprudence of Insanity, to take charge of the McLean Asylum during the absence of Dr. Tyler in Europe.

BRAITHWAITE'S RETROSPECT, PART 63.—Members of the Massachusetts Medical Society will this week receive their copies of the Retrospect for July. The subjects of the articles contained in it and the names of the authors lead us to believe it to be a number of unusual interest.

TO SECRETARIES OF MEDICAL SOCIETIES.—Dr. B. W. Butler, Editor of the Philadelphia *Medical and Surgical Reporter*, is about to issue an annual for the use of physicians, and desires to have a record of all regular medical societies in the United States and Canada. Secretaries of societies will confer a favor by communicating to him the titles of the societies with which they are connected, times and places of meeting, names of officers and number of members.

ESSENCE OF TURPENTINE IN PARASITIC DISEASES OF THE HEAD.—Dr. Erlach, of Berne, remarks that in order to destroy parasites, which are the cause of several diseases of the hairy scalp, Küchenmeister recommended the application of alcohol, which retards the development of spores and mushrooms. Experience has shown, however, that the action of alcohol does not extend to the fungi that are found in the hair follicles. Tincture of iodine acts better than alcohol; nevertheless the treatment by this remedy does not last more than three months, even in the most favorable cases. He has found, however, that the application of essence of turpentine by means of a brush is more certain and rapid than all other methods of treatment. He believes he has thus cured a case of herpes tonsurans in seven weeks; several cases of mentagra in a week.—*Practitioner*, from *Giorn. Ital. delle Mal. Venere*, &c.

THE USE OF EARTH AS A DRESSING IN SEVERE BURNS.—In severe burns of all degrees, Dr. Addinell Hewson (*Medical Times*) advises the use of earth, applied in the form of a dry powder or thick paste. He applies the earth powder or paste to the affected surface; over this he places waxed blue paper, and confines all by the bandage. It is claimed that by this method the pain is greatly relieved, the discharge absorbed, fætor diminished, and that the healing process is quickened. Reparation by scabbing is promoted, and the production of nodular cicatricial tissue prevented.—*American Practitioner*.

PREGNANCY WITHOUT MENSTRUATION.—Dr. James Young (*Edinburgh Med. Journal*) lately read to the Obstetrical Society of Edinburgh some statistics, showing how frequently pregnancy had

occurred where the woman had never menstruated more than once or twice during ten or twelve years, and when six or eight children had been born. Dr. Fride said he had attended a girl in her first confinement who was fifteen years of age, and had never menstruated; and he knew of a lady who had been married for twelve years, had seven children, and had only been seven or eight times unwell.—*Medical Record*.

HICCUGH CURED BY CHLORAL.—Dr. P. F. Whitehead has recently prescribed for a patient with hiccough, which had continued for thirty-six hours. Various remedies were used with but little good effect, save a temporary cessation by the use of morphia hypodermically. Thirty grains of chloral gave immediate and permanent relief.—*Ibid*.

TO CORRESPONDENTS.—Communications accepted:—Three cases of Sanstroke.—Recent Advances in Medicine and their Influence on Therapeutics.

PAMPHLETS RECEIVED.—Plastic and Orthopedic: A Report republished from the Transactions of the Illinois State Medical Society for 1871. By David Prince, M.D. Pp. 56.

Deaths in eighteen Cities and Towns of Massachusetts for the week ending August 5, 1871.

Cities and Towns, each place.	No. of deaths in each place.	PARVALENT DISEASES			
		Cholera infantum.	Consumption.	Dysentery and Diarrhea.	
Boston . . .	131	35	20	10	
Charlestown 18		6	4	0	
Worcester . 36		5	5	2	
Lowell . . . 27		4	5	1	
Milford . . . 9		3	2	0	
Chelsea . . . 5		2	0	0	
Cambridge . 26		12	1	1	
Salem . . . 16		6	4	1	
Lawrence . 12		1	4	0	
Springfield 9		0	0	0	
Lynn . . . 21		11	2	0	
Gloucester . 2		0	0	1	
Fitchburg . 3		1	0	0	
Newburyport 4		1	0	1	
Somerville . 11		5	2	0	
Fall River . 20		6	1	2	
Haverhill . . 3		1	0	0	
Holyoke . . . 2		1	0	1	
	355	99	53	20	

From all the above named places there were ten deaths from typhoid fever and seven from scarlet fever. Lowell reports two deaths from smallpox.

GEORGE DEERY, M.D.,
Secretary of State Board of Health.

DEATHS IN BOSTON for the week ending Saturday, August 5th, 131. Males, 63; females, 68. Accident, 6; apoplexy, 4; aneurism, 1; asthma, 1; bronchitis, 1; congestion of the brain, 2; disease of the brain, 2; cancer, 1; cholera infantum, 36; cholera morbus, 3; consumption, 20; debility, 4; diarrhoea, 3; dropsy, 2; dropsy of brain, 3; drowned, 2; dysentery, 7; scarlet fever, 2; typhoid fever, 3; disease of the heart, 3; disease of the kidneys, 1; disease of the liver, 2; congestion of the lungs, 1; inflammation of the lungs, 3; marasmus, 3; old age, 3; paralysis, 2; peritonitis, 1; puerperal disease, 1; rheumatism, 1; disease of the spine, 1; suicide, 1; tumor, 1; malignant disease of throat, 1; tumor, 1; inflammation of uterus, 1; unknown, 1.

Under 5 years of age, 58;—between 5 and 20 years, 9;—between 20 and 40 years, 25;—between 40 and 60 years, 16;—above 60 years, 23. Born in the United States, 38;—Ireland, 33;—other places, 10.